

DARPA-BAA-16-32
Next Generation Social Science (NGS2)
Frequently Asked Questions (FAQs)
as of 3/25/16

67Q: Where is the Next Generation Social Science (NGS2) BAA posted?

67A: The NGS2 BAA can be found

at <https://www.fbo.gov/spg/ODA/DARPA/CMO/DARPA-BAA-16-32/listing.html>

66Q: Where do I submit questions regarding the NGS2 BAA?

66A: If you can't find the answer to your question in the BAA, please send your question to ngs2@darpa.mil.

65Q: Please provide more details regarding the "Enabler" role.

65A: Please refer to the BAA (Table 1 offers a compact summary) and the following questions and answers in this FAQ: 59, 57, 43, 28, and 4. If you still have inquiries, please send a more detailed question to ngs2@darpa.mil.

64Q: Are there budget guidelines in the BAA?

64A: Yes. All proposers are encouraged to provide cost proposals that are realistic and well justified for the research they propose to perform per the guidance outlined in the BAA. For those submitting a full proposal, the use of Attachment 5: Proposal Template – Cost Volume is mandatory.

63Q: Is there a preference for teams that have worked together in the past vs. newly formed teams?

63A: No.

62Q: Is there a preference for domestic vs. international applications/tests?

62A: There is no preference. Per the NGS2 BAA Section I.B.2., one goal of the NGS2 program is to “test model predictions across at least 3 different and representatively diverse populations, with multiple intervention and control groups in each research cycle (i.e., a total of 12 different populations over the entire NGS2 program).” DARPA anticipates this could involve a wide range of different research locations and/or populations. Please remember that “proposers should include their rationale for choosing these populations, inclusion/exclusion criteria, etc.”

61Q: Drawing causal inference about the basic science of “why” in social behavior depends on controlled experimentation. At the same time, identification of new questions for testing may

involve large-scale measurement of human social behavior. Do you see the NGS2 program as being particularly aimed at one or both of these approaches?

61A: DARPA anticipates that reaching the NGS2 goals as outlined in the BAA may require innovative use and combinations of both.

60Q: What are the limitations/constraints on U.S. nationals and foreign nationals participating as primes, sub-primes, individual team members, etc., and how will ITAR concerns be met for these people?

60A: Foreign nationals are welcome to participate in NGS2. Please refer to the BAA, Sections III.A.2 for eligibility guidance and VI.B.4 for export control guidance.

59Q: Is there a mechanism for Enablers to participate in Phase 2, e.g., to support a tool that has been developed and delivered to other performers for their use in Cycles 3 and 4?

59A: Please refer to BAA Table 1 for guidance regarding Enabler participation in Phase 2.

58Q: Should our teaming profiles include which role we would like to take (i.e., ETE, Enabler, T&E)?

58A: Guidance for information to be provided for teaming profiles can be found in the BAA, Section VIII.C. For abstracts and proposals, however, please note that, per the NGS2 BAA, Section I.B.1., “Proposers must specify the category to which they are applying on their submission cover sheet(s).”

57Q: Can a proposer function as both an Enabler and an ETE?

57A: This would depend on the quality and selectability of their respective proposals, should they choose to propose to both the Enabler and the ETE research categories. Per the NGS2 BAA, Section III.D., “Proposers may submit multiple proposals in any of three categories described in Section I.B.1. However, any proposer participating on a T&E proposal—whether as a prime, subcontractor, or in any other capacity from an organizational to individual level—may not propose to, or with a team that is proposing to, either of the two other categories (i.e., ETE team or Enabler). This is to avoid OCI situations between development and testing and to ensure objective evaluation results.”

56Q: Is IRB approval required before kicking off a selected project?

56A: All proposers planning to involve HSR should carefully review the HSR requirements in Section VI.B.2 of the BAA. Any required HSR information (including, but not limited to Institutional Review Board (IRB) draft application plans) must be included in the proposal. Furthermore, any task that involves HSR must be clearly identified in the proposed Statement of Work, schedule, and cost details. DoD/DARPA

funding cannot be used towards human subjects research until ALL approvals are granted.

Proposals involving HSR that fail to supply evidence of or a plan for review by an IRB may be deemed non-conforming and, as such, will not be reviewed.

55Q: Aside from emergent behavior, what are some other exemplar research domains?

55A: Please refer to the BAA, Section I.

54Q: Must all the data be processed automatically/computationally (e.g., is it necessary to process textual data using a computer algorithm)?

54A: This is up to the research team and the solution(s) they propose to accomplish the appropriate goals outlined in the NGS2 BAA.

53Q: How important is computational complexity?

53A: This is up to the research team and the solution(s) they propose to accomplish the appropriate goals outlined in the NGS2 BAA.

52Q: Can data relate to something other than collective identity?

52A: This is up to the research team and the solution(s) they propose to accomplish the appropriate goals outlined in the NGS2 BAA.

51Q: Is data collection from the web acceptable?

51A: Yes, provided it satisfies the requirements detailed in the NGS2 BAA in Section VI.B.2 (also see 7Q/A).

50Q: Is the use of social media within the context of this BAA?

50A: Potentially, provided the proposer satisfies the requirements detailed in the NGS2 BAA in Section VI.B.2 (also see 7Q/A).

49Q: Are proposers limited to submitting abstracts for one project only, or can they submit two entirely separate project abstracts?

49A: Proposers may submit multiple abstracts and proposals in any of the three performer categories. However, to avoid any real or perceived conflicts of interest between development and T&E, proposers participating on a T&E submission may not participate on an Enabler or ETE team submission (see Section III.D for further information).

48Q: Does ETE mean a research footprint that covers policy development and field work?

48A: ETE team roles and responsibilities are covered in the BAA.

47Q: What's DARPA's interest in studying/predicting collective identities of animals under NGS2?

47A: Per the BAA Section I.A, the goal of NGS2 is to build a new capability (methods, models, tools, and a community of researchers) to perform rigorous, reproducible experimental research at scales necessary to understand emergent properties of human social systems. Thus, any proposed research should contribute to this larger goal.

46Q: Can a team develop innovative data tracking technologies as part of this program?

46A: This is up to the research team and the solution(s) they propose to accomplish the appropriate goals outlined in the NGS2 BAA.

45Q: For running observations and interviews to inform data-driven research, what type of training and documentation on Human Subjects Research does DARPA require?

45A: Please review the requirements detailed in the NGS2 BAA in Section VI.B.2

44Q: What is the ethical procedure for contacting the NGS2 PM before submitting a proposal?

44A: Communications at this stage of the solicitation are limited. The overarching goal is for DARPA PMs to engage as openly as possible with proposers while preventing actual or appearance of unfair competitive advantages. In general, it is recommended that questions be submitted to ngs2@darpa.mil, and expressions of interest or capabilities related to NGS2 should be submitted as an abstract or proposal per the guidance of the BAA.

43Q: (a) Does NGS2 envision Enablers remaining free to matrix across ETE teams? (b) May Enablers address multiple goals in multiple TAs?

43A: (a) Yes. Please review the goals of the Enabler research category as described in the BAA. (b) Yes. Anticipated challenges in each TA are listed in the BAA.

42Q: Some recent DARPA programs with large collaborative teams have used "fusion centers" to help "force" collaboration. Are there any plans for that with NGS2?

42A: DARPA does not anticipate providing Government Furnished Equipment or Information at this point. Providing a capability to assist with collaboration may depend on a research team and the solution(s) they propose to accomplish the appropriate goals outlined in the NGS2 BAA. Please review Section I.C.2 for more information on collaboration requirements in NGS2.

41Q: Should proposers propose new social, behavioral theories or focus on existing areas?

41A: As stated in the NGS2 BAA, Section I.B.2, a goal of NGS2 is to enable capabilities to "formalize different variables and parameters from multiple models and theories –

including social and behavioral sciences, but also potentially models or theories from epidemiology, biology, ecology, physics, network science, etc., or combinations thereof – in order to compare their accuracy in predicting the direction and size of effects of different experimental interventions.” DARPA anticipates that this may include both existing as well as potentially new theories and models.

40Q: Will NGS2 make any effort to obtain data on people from other federal agencies or provide other federal capabilities?

40A: DARPA does not anticipate providing Government Furnished Equipment or Information at this point.

39Q: Does mining online social network profile data constitute Human Subjects Research?

39A: Per the NGS2 BAA, Section VI.B.2, “All research selected for funding involving human subjects, to include use of human biological specimens and human data, must comply with the federal regulations for human subjects protection. Further, research involving human subjects that is conducted or supported by the DoD must comply with 32 CFR 219, Protection of Human Subjects (and DoD Instruction 3216.02, Protection of Human Subjects and Adherence to Ethical Standards in DoD-Supported Research (<http://www.dtic.mil/whs/directives/corres/pdf/321602p.pdf>)).”

38Q: If an organization was unable to participate in Proposers’ Day, are they still eligible to submit an abstract and/or proposal?

38A: Yes.

37Q: What populations should ETE teams be using to reproduce results? Are there targeted sizes for these experiments for costing guidance?

37A: See Table 1 in the BAA for guidance regarding when ETE teams are expected to exchange data and collect new data. See 15Q/A for guidance regarding targeted experiment size.

36Q: What is the anticipated/preferred level of “necking down” that proposers should target for Phase 2?

36A: This is up to the research team, their proposed research category, and the solution(s) they propose to accomplish the appropriate goals outlined in the NGS2 BAA. See Table 1 in the NGS2 BAA for information on goals for each research category by Phase.

35Q: Are ETE teams preferred over Enablers? Should a team with an enabling technology seek an ETE team as a preferred bid strategy?

35A: This is up to the research team and the solution(s) they propose to accomplish the appropriate goals outlined in the NGS2 BAA. DARPA anticipates awards to multiple development teams with the majority of funding reserved for teams with an integrated, end-to-end research approach. Only one award is anticipated for a Testing and Evaluation.

34Q: What type of feedback can we expect from an abstract (e.g., comments or just a recommendation to bid or not)?

34A: Per the BAA, Section IV.B.1, DARPA will respond to abstracts with a statement as to whether DARPA is interested in the idea. If DARPA does not recommend the proposer submit a full proposal, DARPA will provide detailed feedback to the proposer regarding the rationale for this decision. Regardless of DARPA's response to an abstract, proposers may submit a full proposal.

While it is DARPA policy to attempt to reply to abstracts within thirty calendar days, proposers to this solicitation may anticipate a response within approximately two weeks.

33Q: Should I identify potential proposal partners ahead of time that have the required expertise to fulfill portions of the project?

33A: Yes. Team formation (including communication) is the sole responsibility of the proposer. Per NGS2 BAA Section I.A, DARPA encourages participation from a wide and diverse combination of disciplines and skill sets, to include not only social sciences, but also physics, computer science, biology, game design, mathematics, and others. Teaming arrangements do not need to be finalized at the time of abstract submission; however, mention of potential teaming/collaboration arrangements is encouraged.

32Q: If an FFRDC is proposed as a prime/subcontractor/teammate, will DARPA directly fund the FFRDC or will the funding for the FFRDC flow through the prime contract like any other subcontractor?

32A: Please review the NGS2 BAA, Section III.A.1, "Federally Funded Research and Development Centers (FFRDCs) and Government Entities." It is up to the proposer to determine the teaming structure that makes the most sense based on the nature of the proposed work. The Government Contracting Officer will determine the appropriate award instrument and funding mechanism depending upon the nature of the work proposed, the required degree of interaction between parties, and other factors.

31Q: Are Federally Funded Research and Development Centers (FFRDCs) and Government entities (e.g., Government/National laboratories, military educational institutions, etc.) eligible to receive DARPA funding for this opportunity?

31A: Please review the eligibility requirements in Section III.A.1 of the BAA. Federally Funded Research and Development Centers (FFRDCs) and Government entities may propose provided they meet the eligibility requirements outlined therein.

30Q: Might a recruitment system or data management system be an enabler of interest?

30A: This is up to the research team and the solution(s) they propose to accomplish the appropriate goals outlined in the NGS2 BAA.

29Q: Will the ETE teams be exchanging their entire platforms and experimental infrastructure to rerun each other's experiments? Does the rerun involve different participants, or is it a reanalysis of the collected data?

29A: Please see details on reproducibility of ETE results and replication of ETE experiments in the NGS2 BAA, Section I.B.3. As defined, DARPA does not anticipate that testing the reproducibility of a given ETE team's results will require exchanging platforms or experimental infrastructure with other ETE performers. Per Table 1, DARPA expects ETE experimental replications to involve new participant populations.

28Q: Will the Enabler teams be delivering intermediate products to the ETE teams during Phase 1, or will their main delivery occur at the end of Phase 1 and start of Phase 2?

28A: Please review the anticipated timeline for each research category in Table 2, Section I.D, in the NGS2 BAA. More specific deliverables and schedules will depend on the research team and the solution(s) they propose to accomplish the appropriate goals outlined in the NGS2 BAA.

27Q: For Enablers proposals, what evidence should be provided in the Phase 1 proposal for being able to integrate with one or more ETE teams before Phase 2?

27A: Please refer to Table 1 in the BAA.

26Q: Is there a small business subcontract requirement for proposals above a certain dollar value?

26A: Yes. Please review BAA Attachment 5 (The Cost Volume Template), Section 11.

25Q: Would you be interested in "social constructivist" approaches of collective identity? If so, what does the weight of religion/political view have, and would you be interested in understanding variables influencing identity formation over time?

25A: Per the BAA, a major goal of NGS2 is to enable capabilities to "formalize different variables and parameters from multiple models and theories – including social and behavioral sciences, but also potentially models or theories from epidemiology, biology, ecology, physics, network science, etc., or combinations thereof – in order to compare their accuracy in predicting the direction and size of effects of different experimental

interventions.” DARPA anticipates that performers focusing on this goal may draw upon a wide range of different theories, which may include social constructivist theories, and the predictions they make about the relationship between different variables and the emergence of collective identity over time.

24Q: Different social science literatures offer somewhat overlapping and contrasting definitions of what collective identities are. What does NGS2 consider the important aspects and phenomena of collective identities?

24A: As noted in the NGS2 BAA, Section I.A., a specific challenge of the NGS2 program is to determine “what matters most” for collective identity formation. Hence a major research goal of the program is to help clarify the important aspects of collective identities.

23Q: Please outline what you would consider to be a major success for this program.

23A: A major success of the NGS2 program would be the demonstration of a new capability (methods, models, tools, and a community of researchers) to perform rigorous, reproducible experimental research at scales necessary to understand emergent properties of human social systems.

22Q: Would it be acceptable to model one “identity” then adapt that model for other identities and interactions or between identities and society?

22A: The specific approach to modeling will depend on the research team and the solution(s) they propose to accomplish the appropriate goals outlined in the NGS2 BAA.

21Q: Is there a specific collective identity for this research (e.g., religion, political affiliation, relation between identity and society)?

21A: No.

20Q: Do the ETEs approach all of TA1, 2, and 3 or exactly one TA?

20A: Per the BAA Section I.B.1, ETE team proposals are expected to address all TAs.

19Q: How would you validate the innovative methods resulting from this research since our current methodologies are actually limited?

19A: Please review the BAA, Section I.C.5, “Validation.”

18Q: Can projected budgets be changed between an abstract and the final proposal?

18A: Yes. Abstracts are expected to provide ROM estimates that may be refined for a full proposal.

17Q: Will DARPA or the T&E team provide a mechanism for sharing data and population information, or will this task be up to the teams?

17A: DARPA does not anticipate providing Government Furnished Equipment or Information at this point. Providing a capability to assist with collaboration may depend on a research team and the solution(s) they propose to accomplish the appropriate goals outlined in the NGS2 BAA. Please review Section I.C.2 for more information on collaboration requirements in NGS2.

16Q: How will the program protect respondent anonymity in data?

16A: Please review the BAA Section IV.B.2, “Human Subjects Research.” DARPA expects all NGS2 performers to understand, respect, and obey the applicable laws and statutes regulating human subjects research, including requirements for the protection of Personally Identifiable Information (PII) and other potentially sensitive data, and as appropriate – per the BAA, Section I.C – expects proposers to describe their approaches to data management.

15Q: (a) Who chooses the “three populations” mentioned in the BAA (i.e., is there a DARPA mandate? (b) What is meant by “three populations”: for example, different age groups or different sets of participants drawn from the same pool? (c) How will the populations be chosen? (d) When will the populations be chosen? (e) Since there is a trade-off between data set size and modeling, how large does DARPA expect the data sets to be?

15A: Specifics regarding populations, timing, size, etc., may depend on a research team and the solution(s) they propose to accomplish the appropriate goals outlined in the NGS2 BAA. Per the BAA, Section I.B.2, ETE proposers should describe and justify the numbers of participants that a proposer will seek to include, sufficient to test model predictions across at least 3 different and representatively diverse populations, with multiple intervention and control groups in each research cycle (i.e., a total of 12 different populations over the entire NGS2 program). Proposers should include their rationale for choosing these populations, inclusion/exclusion criteria, etc.

14Q: Could an experimental method include waiting for naturally-occurring (i.e., beyond researchers’ control) phenomena, such as natural experiments?

14A: Although it seems unlikely that the NGS2 performance period and scope will afford sufficient time to collect enough data to provide meaningful results and replicable outcomes from natural experiments, DARPA is open to the idea if proposers provide credible justification as to how that approach could support their research and the larger NGS2 goals.

13Q: Can an organization or individual participate on multiple teams (excluding T&E)?

13A: Yes: an organization or individual can participate on multiple teams excluding T&E. Please review the BAA Section III.B.D., “Other Eligibility Requirements.”

12Q: Will this BAA restrict the use of data related to U.S. citizens?

12A: Please review the BAA Section VI.B.2, “Human Subjects Research.” DARPA expects all NGS2 performers to understand, respect, and obey the applicable laws and statutes regulating human subjects research, including requirements for the protection of Personally Identifiable Information (PII) and other potentially sensitive data, and as appropriate – per the BAA, Section I.C – expects proposers to describe their approaches to data management.

11Q: Can we use existing IRBs?

11A: This will depend on a research team and the solution(s) they propose to accomplish the appropriate goals outlined in the NGS2 BAA. Please review the BAA Section VI.B.2., “Human Subjects Research.”

10Q: For the purposes of this BAA, will the use of social network data from open accounts be considered human subjects research?

10A: Please review the BAA Section VI.B.2, “Human Subjects Research.” Per the NGS2 BAA, Section VI.B.2, “All research selected for funding involving human subjects, to include use of human biological specimens and human data, must comply with the federal regulations for human subjects protection. Further, research involving human subjects that is conducted or supported by the DoD must comply with 32 CFR 219, Protection of Human Subjects (and DoD Instruction 3216.02, Protection of Human Subjects and Adherence to Ethical Standards in DoD-Supported Research (<http://www.dtic.mil/whs/directives/corres/pdf/321602p.pdf>)).”

9Q: NGS2 has an aggressive schedule for executing experiment cycles. This may preclude extensive platform or experimental development prior to the first cycle. Is NGS2 open to phased platform development where some experimental capabilities do not come online until later cycles?

9A: This will depend on a research team and the solution(s) they propose to accomplish the appropriate goals outlined in the NGS2 BAA.

8Q: Can you provide a sense of budgets for each area/phase of the program or an order of magnitude size of award? Is there an approximate number of awards anticipated?

8A: There is no set budget per award. DARPA anticipates awards to multiple development teams with the majority of funding reserved for teams with an integrated, end-to-end research approach. Only one award is anticipated for a Testing and Evaluation.

7Q: Does NGS2 have a preference for data mining and analytics applied to existing forums of human interaction (e.g., online games, virtual communities, Twitter) or custom-designed experimental tasks to test specific hypotheses?

7A: NGS2 welcomes the use of any domain or combination within the continuum that makes sense to reach the research goals.

6Q: Is the project limited to laboratory research only?

6A: No. Per BAA Section I.A, the goal of NGS2 is to build a new capability (methods, models, tools, and a community of researchers) to perform rigorous, reproducible experimental research at scales necessary to understand emergent properties of human social systems. DARPA anticipates that this capability may require research that is not (solely) confined to a laboratory.

5Q: Is an interdisciplinary social science project (e.g., to investigate human conflict systems at regional-global scales in terms of mechanisms and forces of strategic evolution of instability and stability) within the scope of “human systems” as intended in the BAA description section?

5A: Per BAA Section IV, proposers are highly encouraged to submit an abstract in advance of a full proposal to minimize effort and reduce the potential expense of preparing an out of scope proposal. This provides DARPA an opportunity to provide feedback on your specific proposed approach. That said, per BAA Section I.A, the goal of NGS2 is to build a new capability (methods, models, tools, and a community of researchers) to perform rigorous, reproducible experimental research at scales necessary to understand emergent properties of human social systems. Thus, any proposed research should therefore contribute to this larger goal.

4Q: Does DARPA want proposers to develop teams that can address all ETE, Enabler, and T&E requirements?

4A: As detailed in the NGS2 BAA, Section I.B.1, proposer performance is expected to occur in one of the three research categories, and proposers should identify to which research category they are proposing: End-to-End, Enablers, or Test and Evaluation. Proposers may submit abstracts and proposals in any of these three categories. However, to avoid any real or perceived conflicts of interest between development and T&E, proposers participating on a T&E submission may not participate on an Enabler or ETE team submission (See Section III.D for further information.).

3Q: Do proposers need to comprise teams with multiple partners and organizations? Are you able to offer any guidance on teaming or partnering?

3A: Per NGS2 BAA Section I.A, DARPA encourages participation from a wide and diverse combination of disciplines and skill sets - to include social sciences, but also physics, computer science, biology, game design, mathematics, and others. To that end,

teaming is highly encouraged before proposal submissions. However, proposers are not required to comprise teams for certain specific kinds of performer categories such as T&E (see BAA Section I.B.1, "Performer Categories"). Please refer to Section VIII.C of the BAA for more information on teaming. Specific content, communications, networking, and team formation are the sole responsibility of the participants.

2Q: Is NGS2 6.1/basic research?

2A: Yes. Please refer to the BAA, Section II.B, "Fundamental Research" for further details.

1Q: Will DARPA consider social science concepts that do not fit under TA1, TA2 or TA3?

1A: All proposers must describe their approach in ways that reflect and address the TAs and the research process considerations outlined in each TA description.